

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF CALIFORNIA

HOOPA VALLEY TRIBE,

Plaintiff,

v.

UNITED STATES BUREAU OF RECLAMATION; DEBRA ANNE HAALAND, in her official capacity as Secretary of the Interior; MARIA CAMILLE CALIMLIM TOUTON, in her official capacity as Commissioner of the United States Bureau of Reclamation; ERNEST A. CONANT, in his official capacity as U.S. Bureau of Reclamation California-Great Basin Regional Director; and UNITED STATES DEPARTMENT OF THE INTERIOR

Defendants.

Case No. 1:20-cv-01814-JLT-EPG

**DECLARATION**

I, Michael Dixon, declare as follows:

1. I am currently the Executive Director of the Trinity River Restoration Program ("Restoration Program"), where I lead a partnership of six agencies and two tribes in efforts to restore the anadromous fisheries of the Trinity River. I have held that position since March of 2019.
2. I am writing this declaration to emphasize the Department of the Interior's position that the Winter Flow Project is an implementation of the 2000 Trinity River Mainstem Fishery Restoration Record of Decision (2000 ROD) in accordance with that decision's adaptive management mandate.
3. In addition to the measures of variable instream flows, channel rehabilitation, sediment management, tributary restoration, and infrastructure modification, the Restoration Program was directed by the 2000 ROD to incorporate an adaptive management approach to implementing its restoration tools. Per the 2000 ROD (p15), the adaptive management approach is designed to "ensure the proper implementation of the [ROD's] measures, conduct appropriate scientific monitoring and evaluation efforts, and *recommend possible adjustments to the annual flow schedule within the designated flow volumes provided for in this ROD* or other measures in order to ensure that the restoration and maintenance of

the Trinity River anadromous fishery continues based on the best available scientific information and analysis.” (emphasis added). Regarding the variable flow component specifically, the 2000 ROD stated on p12 that “Based on subsequent monitoring and studies guided by the Trinity Management Council, the schedule for releasing water on a daily basis, according to that year’s hydrology, may be adjusted, but the annual flow volumes established in [a referenced table] may not be changed.” Consequently, the Winter Flow Project proposes to change the scheduling of annual restoration volumes on a daily basis but does not change the annual volume.

4. Accordingly, the Restoration Program has implemented a robust science and monitoring program to inform and improve the implementation of its restoration tools. The process for this takes the form of a technical workgroup of discipline-specific experts (e.g. the Physical Workgroup consists of geomorphologists and hydrologists) from across the eight agencies and tribes developing a recommendation based on new findings from internal and/or external science and monitoring. That technical workgroup brings the recommendation forward to the Restoration Program’s Interdisciplinary Team, which includes all of the technical workgroup coordinators, as well as representatives from each of the Trinity Management Council agencies and tribes. The Interdisciplinary Team evaluates the proposal, and if informal consensus is reached, brings the proposal forward to the Trinity Management Council. The Trinity Management Council then votes through procedures outlined in its bylaws on whether to recommend implementing the change or proposal. The Trinity Management Council meets at least quarterly to discuss and vote on aspects of the Restoration Program’s science and management actions.
5. In the 24 years since the Trinity River Flow Evaluation Final Report (“TRFES”; USFWS and HVT 1999) was completed, the Restoration Program (as recommended by the Trinity Management Council) has made numerous, evolutionary changes to how it implements each of those tools based upon newer science:
  - a) Sediment management: The volume of gravel introduced on an annual basis has decreased through time as monitoring demonstrated that the 1999 TRFES overestimated the potential sediment transport capacity of ROD flows. We have also changed the size of rock used in augmentation through time for the same reasons, and our augmentation locations have shifted based on monitoring of gravel oversaturation vs deficits in areas below the dam (e.g. Gaueman and de Julio 2022). Further, modern research has determined that, in contrast to the 1980s-1990s when a surplus of fine sediment existed in the upper river due to inadequate flows and poor historical upslope land management (erosion), the uppermost Trinity River below Lewiston Dam may actually have shifted to a fine sediment-deprived state, which is adversely impacting physical and ecological processes (Buxton 2021); consequently, we are now considering changes to sediment augmentation practices in the upper river.
  - b) Watershed restoration: The 1984 Trinity Basin Fish & Wildlife Management Act had envisioned a broad suite of project types in Trinity River tributaries the whole way to the confluence with the Klamath, but these were pared down in the ROD to just fine sediment reduction activities in the uppermost sections of the river below Lewiston

Dam. It has since become apparent that, with the overwhelming majority of potential coho, steelhead, and spring Chinook habitat above the dams (as well as a large proportion of fall Chinook and lamprey habitat), successful achievement of congressionally mandated pre-dam run size restoration goals cannot occur without implementing a broader suite of actions in the tributaries. Accordingly, the Restoration Program has expanded our tributary restoration grant program (currently administered through the National Fish and Wildlife Foundation) beyond fine sediment reduction to include fish passage, base flow improvement, and habitat improvement in key tributaries.

- c) Channel rehabilitation. The 2000 ROD, based on the TRFES, directed out of channel, light touch floodplain lowering and riparian berm removal activities at 44 locations, as well as construction of 3 specific side channels. As monitoring in the late 2000s/early 2010s showed how little change the ROD flows were able to make in the dam and mining-impacted channel, we began doing much more in-channel work, including large wood features, off-channel habitat construction such as ponds and additional side channels, and much lower floodplains than those envisioned in the 1999 TRFES. We have also revisited some previous sites to augment existing work, performed work at sites that were not among those initial 47 sites, and chosen NOT to implement work at a handful of the original 47 sites based on more modern science.
- d) Flow: Of particular note, the Restoration Program has never strictly implemented the example hydrographs from the ROD, and how the water is released in a given year has been adjusted in multiple ways, including: earlier peak flows (to reduce adverse effects of late-season releases that are described in detail in Abel et al. 2022), shorter peak durations (to more efficiently use water because of hysteresis that occurs during multiday releases, slowing rate of sediment transport), and changes to the slope receding limb of the hydrograph (to account for learning about riparian vegetation seed dispersal and root growth).

6. As described in paragraph 3 above, the Trinity Management Council was delegated responsibility for making science-based recommendations to improve how the Restoration Program's tools are applied to meet restoration goals, specifically including scheduling of annual flows. Development of a detailed, adaptive management-focused proposal to shift annual flow management was directed by the Trinity Management Council at their September 2020 quarterly meeting. The resulting proposal, summarized in the Winter Flow Project Final Report (Abel et al. 2022), was recommended for implementation in Water Year 2023 to the Regional Directors of the Bureau of Reclamation and U.S. Fish & Wildlife Service in a 7-1 vote at the Trinity Management Council's December 2022 quarterly meeting.

I declare, under penalty of perjury pursuant to 28 U.S.C. 1746, that the foregoing is to the best of my knowledge true and correct.

Executed this 25th day of January, 2023 in Trinity County of California



Dr. Michael Dixon

Abel, C. E., K. De Juilio, K. T. Lindke, S. Naman, and E. E. Thorn. 2022. Trinity River winter flow project. Report for the Trinity River Restoration Program (TRRP). TRRP, Weaverville, California. Available: <https://www.trrp.net/library/document?id=2566>.

Buxton, T. H. 2021. History of fine sediment and its impacts on physical processes and biological populations in the restoration reach of the Trinity River, CA. Report TRRP-2021-1 for the Trinity River Restoration Program (TRRP). Trinity River Restoration Program, Weaverville, California. Available: [www.trrp.net/library/document?id=2483](https://www.trrp.net/library/document?id=2483).

Gaeuman, D. and K. De Juilio. 2022. Tracking coarse sediment augmentations with RFID tracers in the Trinity River, CA. Report for the Trinity River Restoration Program (TRRP). Yurok Tribe Fisheries Department, Weitchpec, California.  
Available: <https://www.trrp.net/library/document?id=2585>.

TMC (Trinity Management Council). 2019. Bylaws of the Trinity Management Council. . Trinity River Restoration Program, Weaverville, California.  
Available: [www.trrp.net/library/document?id=2449](https://www.trrp.net/library/document?id=2449).

USDI (U.S. Department of Interior). 2000. Record of decision, Trinity River mainstem fishery restoration final environmental impact statement/environmental impact report. . U.S. Department of Interior, Washington D.C., Washington D.C..  
Available: <https://www.trrp.net/library/document?id=227>.

USFWS (U.S. Fish and Wildlife Service) and HVT (Hoopa Valley Tribe). 1999. Trinity River flow evaluation final report. USFWS, Arcata, California and HVT, Hoopa, California.  
Available: <https://www.trrp.net/library/document?id=226>.